

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 8, 11 and 14 are currently pending.

Claim Rejections - 35 USC § 103

Claims 1, 8, 11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Onozawa et al. (US 6,103,370) in view of Nakamura et al. (US 2002/0085284) and in view of the Ciba® TINUVIN® 328 or Ciba® CHIMASSORB® 81 product literature and the Ciba® TINUVIN® 1130 product literature.

Regarding claim 1, Onozawa (Column 1, lines 43-50) teaches a hard coat sheet comprising a base sheet and a coat layer. The base sheet (Column 2, lines 8-12) can be a plastic film. The film can be a glare preventing film for a computer display (Column 1, lines 6-14). The coat layer can comprise an ultraviolet absorbent (Column 3, lines 44-50). The resin of the coat layer can be cured by electron beam or ultraviolet radiation (ionizing radiation) (Column 2, lines 63-66). The coat layer can also comprise a filler, such as silica or acrylic powder, to provide an anti-glare property (Column 3, lines 19-28). The filler is present at 0.5 to 50 parts per 100 parts by weight of the acrylate resin. Since the acrylate resin can be the primary component of the coating (Example 1), the weight percentage limitation for the filler meets the limitation for the microparticles. Since, as shown in the Examples, the solvents, which would be removed

during curing, are listed separately from the resin, the weight ratios would be those of the cured composition.

Onozawa does not teach the size or preferred shape of the filler.

Nakamura (Paragraph 9) teaches an anti-glare film for use on an image display device. The binder of the anti-glare layer is formed from the ionizing radiation curable resins (Paragraph 43), including the same types of resins (Paragraph 42) as in Onozawa. The matting agent particles for the anti-glare layer include silica particles and cross-linked acrylic particles (Paragraph 59). The preferred shape of the matting agent is spherical, in order to obtain a consistent anti-glare property (Paragraph 60). The size of the matting particles is from 1 to 5 microns (Paragraph 57), in order to have a sufficient degree of anti-glare behavior, while still maintaining a sharp transmission.

It would be obvious to one of ordinary skill in the art to use the size and shape anti-glare particles of Nakamura, as the anti-glare particles of Onozawa, in order to form an anti-glare layer having a consistent anti-glare property with a sufficient degree of anti-glare behavior, while still maintaining a sharp transmission.

Onozawa (Column 3, lines 44-50) teaches that ultraviolet absorbers can be added to the coat layer and uses one example absorber, TINUVIN® 1130 and lower concentrations of absorber in the examples, but does not preclude using a different ultraviolet absorber or different loadings.

As shown in the TINUVIN® 1130 product literature, TINUVIN® 1130 has a molecular weight of 637.

The TINUVIN® 328 product literature shows that TINUVIN® 328 has a molecular weight of 351.5. The Ciba® CHIMASSORB® 81 product literature shows that CHIMASSORB® 81 has a molecular weight of 326.4. As shown by the transmittance spectrum of the ultraviolet absorbers, TINUVIN® 328 and CHIMASSORB® 81 have a lower transmittance in the ultraviolet spectrum than does TINUVIN® 1130 for the same loading. Thus, TINUVIN® 328 or CHIMASSORB® 81 will be a more effective ultraviolet absorber than TINUVIN® 1130. The second page of the TINUVIN® 328 product literature and the second page of the CHIMASSORB® 81 product literature teaches that the amount of TINUVIN® 328 or CHIMASSORB® 81 required for optimum performance should be determined in trials covering a concentration range. Thus, the amount of absorber would be a results effective variable that would determine the degree of ultraviolet absorption of the coat layer.

It would be obvious to one of ordinary skill in the art to use TINUVIN® 328 or CHIMASSORB® 81 as the ultraviolet absorber for the sheet of Onozawa, in order to have a more effective ultraviolet absorber than the example absorber and it would be obvious to one of ordinary skill in the art to vary the amount of absorber of Onozawa to amounts, including those presently claimed, in order to obtain a desired degree of ultraviolet absorption as is taught by the TINUVIN® 328 or CHIMASSORB® 81 product literature.

Onozawa (Column 2, lines 35-62) further teaches that the resin of the coat layer can also comprise 0.1 to 100 parts by weight of an organopolysiloxane based on 100 parts by weight of the acrylate resin. Since, as shown in the Examples, the solvents

which would be removed during curing are listed separately from the resin, the weight ratios would be those of the cured composition. Onozawa (Column 3, lines 61-62) teaches that the coat layer preferably has a thickness from 1 to 10 microns. Since this thickness includes thicknesses smaller than the particle size, the limitation is met. Further, Nakamura (Paragraphs 48 and 49) teaches that the desired internal scattering of the anti-glare layer can be imparted by having the matting particles size larger than the layer thickness.

Regarding claim 8, Ciba® CHIMASSORB® 81 is a benzophenone based ultraviolet absorber.

Regarding claim 11, as stated above, the microparticles can be silica particles.

Regarding claim 14, Ciba® TINUVIN® 328 is a benzotriazole based ultraviolet absorber.

Response to Arguments

Applicant's arguments filed June 13, 2011 have been fully considered but they are not persuasive.

As set forth in MPEP 716.02(d), whether unexpected results are the result of unexpectedly improved results or a property not taught by the prior art, "objective evidence of nonobviousness must be commensurate in scope with the claims which the evidence is offered to support". In other words, the showing of unexpected results must be reviewed to see if the results occurred over the entire claimed range, *In re Clemens*, 622 F.2d 1029, 1036, 206 USPQ 289, 296 (CCPA 1980). Applicants have not provided

data to show that the unexpected results do in fact occur over the entire claim range of organopolysiloxane content, ultraviolet absorber formula weight and microparticle content. Further, there is no data presented just below the lower limit of thickness as a percentage of particle diameter, to show that this range provides unexpected results over values below the claimed range.

Applicant argues unexpected results based on the molecular weight of the UV absorber. However, as evidenced by Iryo et al. (JP 11-271501) (Paragraphs 14-17 and 48) it was known in the art at the time of the invention to limit the molecular weight of the UV absorber to the claimed range in order to minimize yellowing of a lens material.

Applicant argues that any result effective variable variation in the amount of UV absorber would be limited to the recommended concentrations of the Ciba® product literature. However, the second page of the TINUVIN® 328 product literature and the second page of the CHIMASSORB® 81 product literature teaches that the amount of TINUVIN® 328 or CHIMASSORB® 81 required for optimum performance should be determined in trials covering a concentration range and thus, would not be limited only to the recommended concentrations.

Applicant argues that the example of Onozawa et al. (US 6,103,370) that contains filler has a higher percentage of silicone resin than claimed. Applicant further argues that the anti-glare filler and UV absorber are optional ingredients and that these ingredients are not shown in an example together. However, "applicant must look to the whole reference for what it teaches. Applicant cannot merely rely on the examples and argue that the reference did not teach others." In re Courtright, 377 F.2d 647, 153

USPQ 735,739 (CCPA 1967). Onozawa (Column 2, lines 35-62) teaches that the resin of the coat layer can comprise 0.1 to 100 parts by weight of an organopolysiloxane based on 100 parts by weight of the acrylate resin. Since, as shown in the Examples, the solvents which would be removed during curing are listed separately from the resin, the weight ratios would be those of the cured composition. While there is not an example using all of the components, there is no teaching that would disparage using the claimed components together and the Examiner maintains that the broader teachings of Onozawa encompass the organopolysiloxane in the claimed weight range, the anti-glare filler and the UV absorber in the resin composition.

Applicant's arguments with respect to the 35 USC 112, first and second paragraph rejections have been fully considered and are persuasive. Thus, the 35 USC 112 rejections are withdrawn.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth A. Robinson whose telephone number is (571)272-7129. The examiner can normally be reached on Monday- Friday 8 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on 571-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. A. R./
Elizabeth Robinson
Examiner, Art Unit 1787

/Alicia Chevalier/
Supervisory Patent Examiner, Art Unit 1788

September 5, 2011